Phosphorus, Sulfur and Silicon and the Related Elements 2018

Synthesis and complexation of N,N-Bis(--diethylhydroxyphosphorylmethyl)-N-butylamine

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2018, © 2018 Taylor & Francis Group, LLC. The acid-base and complexing properties of N,N-bis(O-diethylhydroxyphosphorylmethyl)-N-butylamine (H3L) with divalent metals were investigated in aqueous solution via the potentiometric titration method. The formation of 1:1 species has been established. The structure of complex N,N-bis(--diethylhydroxyphosphorylmethyl)-N-butylamine with copper(II) was determined using an X-ray diffraction method.

http://dx.doi.org/10.1080/10426507.2018.1539998

Keywords

Acid-base properties, aminophosphonates, complexation, stability constants

References

[1] Bruker. APEX3 Crystallography Software Suite, Bruker AXS, Inc., Madison, WI, USA, 2016.
[2] Bruker. SAINT Crystallography Software Suite, Bruker AXS, Inc., Madison, WI, USA, 2016.
[3] Sheldrick, G. M. A short history of SHELX. Acta Crystallogr. A Found. Adv. 2008, 64, 112–122.